

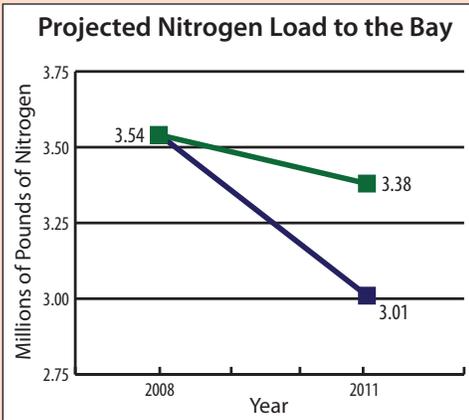


# District of Columbia

## 2011 Milestones to Reduce Nitrogen and Phosphorus



### Nitrogen Reduction Milestone



The District of Columbia's 2011 milestone commitment is to reduce nitrogen by 159,000 pounds by the end of the three-year period (2009-2011).

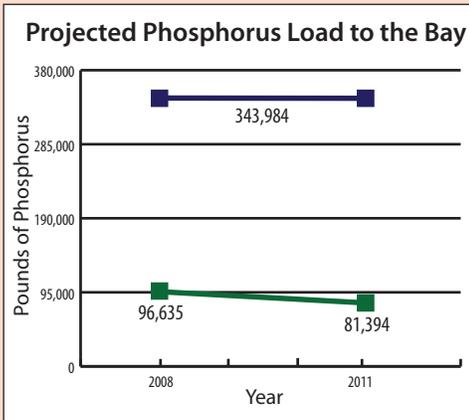
Reduction at Previous Rate of Progress	530,267 lbs.
<b>Pollution Load after Previous Rate of Progress</b>	<b>3.01M</b>
Reduction at Milestone Rate of Progress	159,000 lbs.
<b>Pollution Load after Milestone Rate of Progress</b>	<b>3.38M</b>
<b>Increase in Rate of Progress</b>	<b>-70%**</b>

*M = Millions of Pounds of Nitrogen*

\*\* The District will likely meet its nitrogen reduction commitment in 2015. However, because of requirements to construct Enhanced Nutrient Removal at the Blue Plains wastewater treatment plant, for this milestone period the nitrogen loadings will increase temporarily. The next phase of two-year milestones (2011-2013) will reflect the changes at Blue Plans and will result in decreasing nitrogen loads (see back for more information).

While wastewater from Blue Plains constitutes the majority of nutrient loadings to the Potomac River, the District is very aggressively tackling other pollutant sources through its innovative non-point source programs. The District is addressing other equally critical pollutants such as: controlling/mitigating thousands of pounds of urban stormwater runoff, containing thousands of pounds of trash, and increasing urban tree canopy by many thousands of acres. All together, these activities will contribute significantly to controlling urban sources of pollutants in this milestone period and beyond (see back for specific examples).

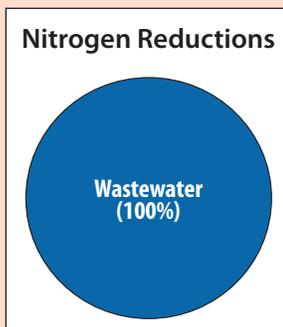
### Phosphorus Reduction Milestone



The District of Columbia has already achieved its phosphorus reduction goal of 343,984 pounds. In 2008, the District's phosphorus load was 96,670 pounds\*.

<b>2003 Phosphorus Reduction Goal</b>	<b>343,984 lbs.</b>
<b>2008 Phosphorus Load*</b>	<b>96,635 lbs.</b>
<b>2011 Projected Phosphorus Load*</b>	<b>81,394 lbs.</b>

### Pollution Reductions by Source



### Funding (FY 2010 and FY 2011)

MS4 Funds	\$26.15M
Non-Point Control	\$7.09M
Point Source (BTN)	\$85.77M
CSO Funds	\$147M
<b>TOTAL</b>	<b>\$266M</b>

\* Nitrogen and phosphorus reductions are based on Phase 4.3 Watershed Model data for urban/suburban reductions and monitored data for wastewater reductions.

## Non-Point Source Pollution Reduction Actions by 2011

### **Expand Urban Tree Canopy**

Plant 4,150 trees (30 acres) per year  
 Increase urban tree canopy coverage by 5 percent  
 (from 35 percent to 40 percent) in 25 years  
 Create new tree box standards to allow for better tree growth

### **Low-Impact Development (LID) Practices**

Install approximately 100 rain gardens and 250 rain barrels  
 Perform 300 downspout connections  
 Develop lot-level residential stormwater detention/retention  
 through RiverSmart Homes incentive program  
 Incorporate LID into 24 percent of all District DOT projects  
 Train federal facilities on new stormwater requirements

### **Build Green Roofs**

Convert 2.5 million square feet to green roofs each year

### **Stormwater Practices and Pollution Prevention**

Implement a program to control discharges from District and  
 federally owned facilities  
 Strengthen auto repair shop education campaign in Hickey Run (pilot)  
 Inspect all auto repair shops, laundromats and dry cleaners at least  
 once every five years  
 Develop and implement a pet waste strategy  
 Mandate installation and use of pumpout stations at all District marinas  
 Restore 2.7 miles of Watts and Pope branches  
 Replace/eliminate 1.5 miles of sewer lines in Watts and Pope branch  
 Complete a DPW street sweeping study and implement long-term  
 enhanced street sweeping and fine particle removal  
 Implement and promote new stormwater regulations that require LID  
 construction as a first option and mandate training for site managers  
 Implement an impervious area-based stormwater fee  
 Review and update zoning regulations to encourage green building

## Point Source Pollution Reduction Actions by 2011

The District of Columbia is implementing the new Blue Plains NPDES permit to install Enhanced Nutrient Removal (ENR) at Blue Plains.

Award contract for design	June 1, 2009
Award contract for construction	December 31, 2011
Place in operation	July 1, 2014
Begin compliance with total nitrogen effluent limit	January 1, 2015

Blue Plains reports the following nutrient reductions (aside from ongoing reductions via the BNR processes for CSOs):

Total nitrogen before any CSO control	123,329 pounds per average year of rain
After completion of nine minimum control projects (May 2009)	70,298 pounds per average year of rain
After completion of first phase of Anacostia CSO Program (2018)	40,000 pounds per average year of rain
After completion of LTCP (2025)	5,300 pounds per average year of rain

## Trash TMDL and Trash Removal

The District is developing a Trash Total Maximum Daily Load (TMDL) and implementation Plan for the Anacostia River by December 2010. The District will:

- Retrofit 100 catch basins for trash control in conjunction with enhancements to the District's street sweeping efforts.
- Install 1,000 storm drain markers annually.
- Install litter trap demonstration projects to divert 6,800 pounds of trash by 2011.
- Determine the type of trash control devices that would be the most effective in retaining large debris and sediment in hot-spot areas identified by a trash survey.